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WHAT IS CLAIMED IS

1. A string trimmer line including:

an elongated filament member having a cross section throughout the length thereof with a thickness which is less than the width thereof and which has top and bottom surfaces located in first and second parallel planes, and a portion of at least one of the top and bottom surfaces located in a plane other than the first and second planes.

2. A string trimmer line according to Claim 1 wherein parallel transverse cross sections of the elongated filament member are the same throughout the length of the elongated filament member.

3. A string trimmer line according to Claim 2 wherein the elongated filament member is made of a high molecular weight orientable plastic.

4. A string trimmer line according to Claim 3 wherein the elongated filament member is made of extruded plastic material.

5. A string trimmer line according to Claim 4 wherein the elongated filament member has at least one groove in at least one of the top and bottom surfaces extending the length of the elongated filament member.

1 5. A string trimmer line according to Claim 5 wherein the
2 elongated filament member has first and second tapered edges
3 extending the length thereof in a plane intermediate the planes of
4 the top and bottom surfaces.

5 7. A string trimmer line according to Claim 5 wherein the
6 thickness of the elongated filament member adjacent a centerline
7 thereof is less than the thickness of the elongated member adjacent
8 the edges thereof.

9 8. A string trimmer line according to Claim 1 wherein the
10 elongated filament member is made of a high molecular weight
11 orientable plastic.

12 9. A string trimmer line including an elongated filament
13 member made of material having molecular orientation in both the
14 direction of the length thereof and in the direction of the width
15 thereof, resulting in bi-axial molecular orientation of the
16 material, the elongated filament member further having a cross
17 section throughout the length thereof with a thickness which is
18 less than the width thereof and which has top and bottom surfaces,
19 at least a portion of which are located in parallel planes.

20 10. A string trimmer line according to Claim 9 wherein the
21 elongated filament member is made of a high molecular weight
22 orientable plastic.

1 11. A string trimmer line according to Claim 10 wherein the
2 elongated filament member has transverse grooves across the width
3 thereof in at least one of the top and bottom surfaces.

4
5 12. A string trimmer line according to Claim 11 wherein the
6 elongated filament member has transverse intersecting grooves
7 substantially across the width thereof in at least one of the top
8 and bottom surfaces.

9
10 13. A string trimmer line according to Claim 1 wherein the
11 elongated filament member is made of extruded plastic material.

12
13 14. A string trimmer line according to Claim 13 wherein the
14 elongated filament member is made of material having molecular
15 orientation in both the direction of the length thereof and in the
16 direction of the width thereof, resulting in bi-axial molecular
17 orientation of the material.

18
19 15. A string trimmer line according to Claim 14 wherein the
20 elongated filament member is made of a high molecular weight
21 orientable plastic.

22
23 16. A string trimmer line according to Claim 1 wherein the
24 thickness of the elongated filament member adjacent a centerline
25 thereof is less than the thickness of the elongated member adjacent
26 the edges thereof.

1 17. A string trimmer line according to Claim 16 wherein the
2 elongated filament member has first and second tapered edges
3 extending the length thereof in a plane intermediate the planes of
4 the top and bottom surfaces.

5
6 18. A string trimmer line according to Claim 1 wherein the
7 elongated filament member has at least one groove in at least one
8 of the top and bottom surfaces extending the length of the
9 elongated filament member.

10
11 19. A string trimmer line according to Claim 1 wherein the
12 elongated filament member has transverse grooves across the width
13 thereof in at least one of the top and bottom surfaces.

14
15 20. A string trimmer line according to Claim 1 wherein the
16 elongated filament member has transverse intersecting grooves
17 substantially across the width thereof in at least one of the top
18 and bottom surfaces.

19
20 21. A string trimmer line according to Claim 1 wherein the
21 elongated filament member has first and second tapered edges
22 extending the length thereof in a plane intermediate the planes of
23 the top and bottom surfaces.
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1 22. A method for manufacturing string trimmer line from high
2 molecular weight plastics including forming an elongated blank of
3 high molecular weight orientable; passing the blank between a pair
4 of rotating calendering rollers to reduce at least a portion of the
5 thickness of the blank and to increase the width thereof to produce
6 a bi-axially oriented elongated filament.

7
8 23. The method according to Claim 22 wherein the calendering
9 rollers produce at least one groove extending the length of the
10 elongated filament.

11 24. The method according to Claim 23 wherein forming the
12 blank is effected by extruding.

13
14 25. The method according to Claim 22 wherein the calendering
15 rollers produce transverse channels across the width of the
16 elongated filament.

17
18 26. The method according to Claim 22 wherein forming the
19 blank is effected by extruding.

20
21 27. The method according to Claim 26 wherein the calendering
22 rollers produce transverse channels across the width of the
23 elongated filament.

1 28. A method for producing string trimmer line including
2 extruding a continuous blank of orientable plastic having a
3 transverse cross section of a predetermined area; supplying the
4 continuous blank to a pair of opposing calendering rollers, the
5 space between which has a cross-sectional area equal to the cross-
6 sectional area of the extruded blank, but with a different cross-
7 sectional configuration to cause bi-axial orientation of finished
8 elongated string trimmer line exiting from the calendering rollers.

9
10 29. The method according to Claim 28 wherein the cross-
11 sectional space between the opposing calendering rollers taken on
12 a plane passing through the axis of both of the calendering rollers
13 of the pair is configured to widen the cross-sectional
14 configuration of a blank of material supplied thereto and to lessen
15 the thickness thereof.
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